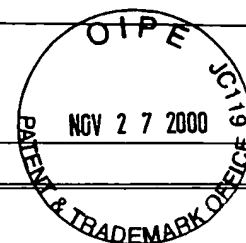


Form PTO-1449 (Modified)	Atty Docket No.: 003771.P001D	Serial No.: 09/612,607
List of Patents and Publications Statement (Use several sheets if necessary)	Applicants: Daniel E. Grupp	
	Filing Date: July 7, 2000	



REFERENCE DESIGNATION				U.S. PATENT DOCUMENTS			
Exam. Initial		Date	Document Number	Name	Class	Sub-Class	Filing Date
<i>DAW</i>		4/4/97	5,608,231	Ugajin et al.	257	24	
<i>DAW</i>		10/26/99	5,972,744	Morimoto et al.	438	197	

FOREIGN PATENT DOCUMENTS								
No.		Document No.	Date	Country	Name	Class	Sub-Class	Trans-lation
DAW		9-331064	12/9/97	Japan				

OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)	
	International Search Report (8/17/2000)
<i>DAW</i>	L J Geerlgs, "Charge Quantisation Effects in Small Tunnel Junctions", <u>Delft University of Technology</u> , The Netherlands, pp. 171-204
Examiner	<i>Douglas W. H. H.</i> Date Considered <i>16 Feb 01</i>

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Application Number	Not Yet Assigned
Filing Date	Herewith
First Named Inventor	Daniel E. Grupp
Group Art Unit	Not Yet Assigned
Examiner Name	Not Yet Assigned
Attorney Docket Number	003771.P001D

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09/012607
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U.S. PATENT DOCUMENTS

Examiner Initials *	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Filing Date if Appropriate
		Number			
De ✓		4,631,352	Daud et al.	12/23/1986	
✓		4,675,711	Harder et al.	6/23/1987	
✓		4,751,563	Laibowitz et al.	6/14/1988	
✓		4,837,604	Faris	6/6/1989	
✓		4,935,804	Ito et al.	6/19/1990	
✓		5,019,530	Kleinsasser et al.	5/28/1991	
✓		5,258,625	Kamohara et al.	11/2/1993	
✓		5,291,274	Tamura	3/1/1994	
✓		5,401,980	Fang et al.	3/28/1995	
✓		5,422,496	Kamohara et al.	6/6/1995	

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OTHER DOCUMENTS

Examiner Initials *	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published (if known).	Translation? Yes/No
✓	P. Hadley, "Single-Electron Tunneling Devices", TMR Programme Certosa di Pontignano (SI), 7/20, September 1997, 1-15	
✓	Haroon Ahmed, Kazuo Nakazato, "Single-Electron Devices", Microelectronic Engineering 32, (1996), pp. 297-315	
✓	John Randall et al., "Potential Nanoelectronic Integrated Circuit Technologies", Microelectronic Engineering 32, (1996) pp. 15-30	
✓	Bogdan Majkusiak, "Experimental and Theoretical Study of the Current-Voltage Characteristics of the MISIM Tunnel Transistor", IEEE Transactions on Electron Devices Vol. 45 No. 9 (Sept. 1998) pp. 1903-1911	
✓	C.A. Mead, "Operation of Tunnel-Emission Devices", Journal of Applied Physics, Vol. 32, No. 4 (April 1959)	

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Date
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16 Feb 01

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				Application Number	Not Yet Assigned
				Filing Date	Herewith
				First Named Inventor	Daniel E. Grupp
				Group Art Unit	Not Yet Assigned
Examiner Name	Not Yet Assigned				
Sheet	2	of	6	Attorney Docket Number	003771.P001D

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Examiner Initials *		U.S. Patent Document	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Filing Date if Appropriate
		Number			
✓		5,475,341	Reed	12/12/1995	
✓		5,589,692	Reed	12/31/1996	
✓		5,604,154	Takahashi et al.	2/18/1997	
✓		5,612,233	Roesner et al.	3/18/1997	
✓		5,646,420	Yamashita	7/8/1997	
✓		5,646,559	Higurashi	7/8/1997	
✓		5,665,979	Takahashi et al.	9/9/1997	
✓		5,677,637	Nakazato et al.	10/14/1997	
✓		5,705,827	Baba et al.	1/6/1998	
✓		5,710,051	Park et al.	1/20/1998	

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OTHER DOCUMENTS			
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✓	Y. Takahashi et al., "Fabrication Technique for SI Single-Electron Transistor Operating at Room Temperature", <u>IEEE Electronics Letters Online</u> No. 19950063 Vol. 31 No. 2 (1/19/95) pp. 136-137		
✓	Kazuo Nakazato and Haroon Ahmed, "Enhancement of Coulomb blockade in Semiconductor Tunnel Junctions", <u>Appl. Phys. Lett.</u> , (3/21/95) pp. 3170-3172		
✓	R. H. Davis and H.H. Hosack, "Double Barrier in Thin-Film Triodes", <u>Journal of Applied Physics</u> , Vol. 34, No. 4 (Part 1), (4/63) pp. 864-866		
✓	Kiyonori Kato, "Liquid helium Level Meter by Audio-Sound Detection", <u>Rev. Sci. Instrum</u> (60/7), (7/89) pp. 1343-1345		
✓	E. Tosatti and R. Martonak, "Rotational Melting in Displacive Quantum Paraelectrics", <u>Solid State Communications</u> , Vol. 92, Nos. 1-2 (1994) pp. 167-180		

Examiner Signature	<i>Douglas W. [Signature]</i>	Date Considered	16 Feb 01
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First Named Inventor	Daniel E. Grupp
Group Art Unit	Not Yet Assigned
Examiner Name	Not Yet Assigned
Attorney Docket Number	003771.P001D

Sheet 3 of 6

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	Number				
Pat	5,731,598		Kado et al.	3/24/1998	
S	5,754,077		Ohata et al.	5/19/1998	
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	3,116,427		Gkaever	12/31/1963	

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DA	Hiroyuki Sakaki, "Quantum Microstructure Devices", <u>Solid State Communication</u> , Vol. 92, Nos. 1-2, (1994) pp. 119-127	
	M. A. Reed et al., "Realization of a Three-Terminal Resonant Tunneling Device: The Bipolar Quantum Resonant Tunneling Transistor" <u>Ann Phys Lett</u> (11) (12 March 1989) pp. 1034-1036	
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	Federico Capaso et al., "Multiple Negative Transconductance and Differential Conductance in a Bipolar Transistor by Sequential Quenching of Resonant Tunneling" <u>Ann Phys Lett</u> 53 (12) (19 Sept 1988) pp. 1056-1058	
	J.L. Huber et al., "An RTD/Transistor Switching Block and its Possible Application in Binary and Ternary Adders", <u>IEEE Transaction of Electron Devices</u> Vol. 44 No. 12 (12/97) pp. 2149-2153	

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				Group Art Unit	Not Yet Assigned
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Sheet	4	of	6	Attorney Docket Number	003771.P001D

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Ph ✓		Robert F. Service, "MICROELECTRONICS" "IBM Puts Fast Chips on a New Footing", <u>Science</u> , Vol. 281, (8/14/98) pp. 893-894	
✓		David Berman et al., "Single-Electron Transistor Research", http://nanowed.mit.edu/annual-report/14 , (downloaded 10/7/98), pp. 1-4	
✓		Mikko Paalanen, "Nanophysics-A New Frontier of Science", http://www.edita.fi/lehdet/polysteekki/297/nanop.html , (downloaded 10/7/98) pp. 1-5	
✓		Steven P. Beaumont, "III-V Nanoelectronics", <u>Elsevier Science B.V., Microelectronic Engineering</u> 32, (1996) pp. 283-295	
✓		P.K. Vasudev and P.M. Zeitzoff, "Si-ULSI with a Scaled-Down Future", <u>IEEE Circuits & Devices</u> , (1998), pp. 19-29	

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				Group Art Unit	Not Yet Assigned
				Examiner Name	Not Yet Assigned
Sheet	5	of	6	Attorney Docket Number	003771.P001D

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OTHER DOCUMENTS		
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De ✓	S.J. Wind et al., "Scaling Silicon MOS Device to Their Limits", <u>Elsevier Microelectronic Engineering</u> 32, (1996) pp. 271-282	
✓	Naoki Yokoyama et al., "A New Functional, Resonant-Tunneling Hot Electron Transistor (RHET)", <u>Japanese Journal of Applied Physics</u> Vol. 24 No. 11 (11/85) pp. 1853-1854	
✓	Victor Ryzhii et al., "Resonant-Tunneling Bipolar Transistors with a Quantum-Well Base", <u>Japanese Journal Applied Physics</u> , Vol. 35 No. 10 (10/96) pp. 5280-5283	
✓	Serge Luryi and Federico Capasso, "Resonant Tunneling of Two-Dimensional Electrons Through a Quantum Wire: A Negative Transconductance Device" <u>Appl. Phys. Lett.</u> 47 (12) (15 Dec 1985) pp. 1347-1349	
✓	J.R. Schreffer, "Symmetry of the Order Parameter in High Temperature Superconductors", <u>Solid State Communications</u> , Vol. 92, Nos. 1-2 (1994) pp. 129-139	

Examiner Signature	<i>Douglas W. H.</i>	Date Considered	<i>16 Feb 01</i>
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				First Named Inventor	Daniel E. Grupp
				Group Art Unit	Not Yet Assigned
				Examiner Name	Not Yet Assigned
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Phe ✓	Federico Capasso and Richard A. Kiehl, "Resonant Tunneling Transistor with Quantum Well Base and High-Energy Injection: A New Negative Differential Resistance Device", J. Appl. Phys. 58 (3) (1 Aug 1985) pp. 1366-1367		
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S ✓	D. Ali and H. Ahmed, "Coulomb Blockade in a Silicon Tunnel Junction Device", Appl. Phys. Lett. 64 (16), (18 April 1994), pp. 2119-2120		

Examiner Signature	<i>Douglas Wells</i>	Date Considered	<i>16 Feb 01</i>
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